

AMENDMENTS TO THE SPECIFICATION

Please replace the fourth paragraph on page 7, lines 10-15, with the following paragraph:

9) During the negotiations, control messages are exchanged between gateway 3 and gateway 9 to coordinate the compression format used on both sides of the link and to establish the gateway to gateway ~~LAPM~~ Link Access Procedure for Modems (LAPM) link. At the end of the negotiation, both modems have connected with their respective local gateway at the best possible connection rate using V.42 LAPM and the same type of compression. Further, the modems on both sides have transitioned into data mode and are ready to begin sending or receiving data.

Please replace the first paragraph on page 2, lines 1-5, with the following paragraph:

For example, packetizing and transporting of modem calls over gateway platforms using G.711 Pulse Code Modulation (PCM) codec, requires digitizing the originating modem phone line at 64Kbps, packetizing and transporting the entire 64 kbps data stream to the other side, and then sending out the same 64 kbps data stream to the remote modem. The advantage of this approach is that it works for any modem that can be received on a standard POTS phone line, and it is simple to implement.

Please replace the first paragraph on page 13, lines 3-10, with the following paragraph:

The microprocessor of the gateway also needs to be modified to accommodate the modem relay processing requirements. The microprocessor must respond to messages from the DSP that instruct the microprocessor to switch over from a voice channel to a modem relay channel in the DSP. The microprocessor must be able to respond to modem relay packets arriving from the network by switching a voice channel to a modem relay channel in the DSP. The microprocessor must allow the operator to configure and query statistics on modem relay channels and must extend the ~~NMM~~ existing operator command set to accommodate commands needed to implement modem relay.

Please replace the second paragraph on page 13, lines 12-14, with the following paragraph:

The ~~SH~~ System Integration Unit (SIU) handles control and status messages from the microprocessor that reference to channel as it does for other types of DSP channels. Messages from the microprocessor that are unexpected or not supported in modem relay mode will be returned with an error code.

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Please replace the fourth paragraph on page 11, lines 18-22, continuing to page 12, line 1, with the following paragraph:

Call discrimination is accomplished through processing in the DSP. When a call is connected, the gateway must determine what type of call processing is required to successfully implement the call: voice, fax relay, or modem relay, ~~or~~ PCM. Individual channels can be pre-configured for a certain type of processing, but in general the gateway does not know in advance what type of devices are going to be involved in the call. The earlier it can distinguish the type of traffic involved in a call, the faster it can switch over to use the right set of processing resources.

Please add the following paragraph, which describes aspects of the table on page 18, between the bottom of the table on page 18 and the first line of the first paragraph on page 18 (line 13 on the page) as follows:

The above table references a series of encoded packets with expanding data lengths of length kN that have sequence numbers beginning with sequence number S up to $S+k+1$. In the table, the cells denoted " $\Delta X \Delta X$ " on the left side of the table can indicate either empty data slots in the packet or null data entered in the packet because the data stream is beginning to be encoded into the packets and the redundancy technique of the present invention has not yet filled these slots in each packet with encoded data.